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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,796	12/13/2004	Marc Bernard	REGIM 3.3-046	8927
530 7590 10/24/2007 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER JAGAN, MIRELLYS	
			ART UNIT 2855	PAPER NUMBER
			MAIL DATE 10/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/517,796

Applicant(s)

BERNARD ET AL.

Examiner

Mirellys Jagan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-7 and 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1764593 to Benning et al [hereinafter Benning] in view of Willcox.

Benning discloses a sensor comprising:

a fluid intake (110) fitted to a streamlined body(120);

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a duct provided in said streamlined body to enable fluid flow, the duct communicating with the fluid intake; and

a sensing element (285) disposed inside said duct;

wherein the sensor comprises a fixing flange having a bearing surface defining a fixing plane for the sensor; the inlet section presents an inclination with respect to a section orthogonal to the main flow direction of the fluid; the inlet section defines a sliding surface that is concave; the fluid intake presents an inside section defined by at least one plane surface that communicates with a chamber that opens to the outside and that constitutes a boundary layer suction chamber; the plane surface includes a plurality of openings (275) extending transversely relative to the general flow direction of the fluid; the openings extend perpendicularly to the general flow direction of the fluid; the openings extend through the thickness of the wall so as to slope downstream; and the streamlined body is inclined relative to the fixing plane and presents a longitudinal axis which extends other than perpendicularly relative to said plane (see figure 2-2).

Benning does not disclose the leading edge of the inlet section of the intake extending so as to define a surface that slopes with respect to a surface perpendicular to the fixing plane; the openings being slots extending in a chevron-shape; the angle between the longitudinal axis of the streamlined body and the direction perpendicular to the fluid flow and to the fixing plane lies substantially in the range 5° to 15° ; the fluid intake having an inside section defined by two substantially planar surfaces extending facing each other and interconnected by surfaces of rounded shape.

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However, Willcox discloses a temperature probe having the leading edge of the inlet section of the air intake extending so as to define a surface that slopes with respect to a surface perpendicular to the fixing plane (see figures 1, 6, 8, 13, 15, and 20).

Therefore, referring to claim 1, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sensor of Benning by sloping the leading edge of the inlet section as disclosed by Willcox in order to provide a more aerodynamic inlet section.

Referring to claims 4-7, 16, and 20, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sensor of Benning and Willcox by changing the shape of the openings to slots having a chevron-shape, and the shape of the fluid intake to a fluid intake having an inside section defined by two substantially planar surfaces extending facing each other and interconnected by surfaces of rounded shape because this is considered to be an obvious modification of the shape or configuration of the openings and fluid intake disclosed by Benning and Willcox since the courts have held that a change in shape or configuration is within the level of skill in the art, and the particular shape claimed is nothing more than one of numerous shapes that a person having ordinary skill in the art would have been able to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149 USPQ 47 (CCPA 1976).

Referring to claims 15, 17, 19, and 21, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sensor of Benning and Willcox by making the angle between the longitudinal axis of the streamlined body and the direction perpendicular to the fluid flow and/or to the fixing plane in the claimed range since it

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has been held that, where the general conditions of a claim disclosed in the prior art, discovering the “optimum range” involves only routine skill in the art. See *In re Aller*, 105 USPQ 233 (CCPA 1995). The claimed range is considered to be the optimum values of the angle shown by Benning and Willcox that a person having ordinary skill in the art at the time the invention was made would have been able to determine using routine experimentation based on the desired accuracy, etc. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the angle disclosed by Benning and Willcox so as to make the angle within the claimed range so as to satisfy the desired accuracy of the device.

4. Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benning and Willcox, as applied to claims 1-7 and 14-21 above, and further in view of U.S. Patent 5,302,026 to Phillips.

Benning and Willcox disclose a sensor having all of the limitations of claims 8-13, as stated above in paragraph 3, except for the sensor element comprising a ceramic tube having a measurement resistive wire wound thereon, and a support mandrel carrying the sensing element and made of a thermally insulating ceramic; the angle between the longitudinal axis of the streamlined body and the direction perpendicular to the fluid flow and to the fixing plane lying substantially in the range 5° to 15°; and the fluid intake having an inside section defined by two substantially planar surfaces extending facing each other and interconnected by surfaces of rounded shape.

Phillips discloses a sensor comprising a fluid intake fitted to a streamlined body, and a duct provided in said streamlined body communicating with the fluid intake and having a

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temperature-sensing element disposed therein. The sensor element comprises a ceramic tube having measurement resistive wire wound thereon, and a support mandrel carrying the sensing element. Phillips discloses that this sensor element is useful since it can be used in a closed-loop temperature control system (see figure 1, and column 2, lines 56-67).

Referring to claim 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sensor of Benning and Willcox by replacing the sensor element with a sensor element as taught by Phillips in order to provide a sensor element that can be used in a closed-loop temperature control system.

Referring to claim 9, the particular type of material used to make the mandrel claimed by Applicant is considered to be the use of a “preferred” or “optimum” material out of a plurality of well known materials that a person having ordinary skill in the art at the time the invention was made would have been able to provide based on the intended use of applicant’s apparatus, i.e., suitability for the intended use of applicant’s apparatus. See *In re Leshin*, 125 USPQ 416 (CCPA 1960), where the courts held that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious.

Referring to claims 11 and 13, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sensor of Benning, Willcox, and Phillips by making the angle between the longitudinal axis of the streamlined body and the direction perpendicular to the fluid flow and/or to the fixing plane in the claimed range since it has been held that, where the general conditions of a claim disclosed in the prior art, discovering the “optimum range” involves only routine skill in the art. See *In re Aller*, 105 USPQ 233 (CCPA 1995). The claimed range is considered to be the optimum values of the angle shown by

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Benning, Willcox, and Phillips that a person having ordinary skill in the art at the time the invention was made would have been able to determine using routine experimentation based on the desired accuracy, etc. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the angle disclosed by Benning, Willcox, and Phillips so as to make the angle within the claimed range so as to satisfy the desired accuracy of the device.

Referring to claim 12, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the sensor of Benning, Willcox, and Phillips by changing the shape of the fluid intake to a fluid intake having an inside section defined by two substantially planar surfaces extending facing each other and interconnected by surfaces of rounded shape because this is considered to be an obvious modification of the shape or configuration of the openings and fluid intake disclosed by Benning, Willcox, and Phillips since the courts have held that a change in shape or configuration is within the level of skill in the art, and the particular shape claimed is nothing more than one of numerous shapes that a person having ordinary skill in the art would have been able to provide using routine experimentation based on its suitability for the intended use of the invention. See *In re Dailey*, 149 USPQ 47 (CCPA 1976).

Response to Arguments

5. Applicant's arguments with respect to claim have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 571-272-2247. The examiner can normally be reached on Monday-Friday from 12PM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJ
October 17, 2007


**GAIL VERBITSKY
PRIMARY EXAMINER**